

COVERED SOURCE PERMIT REVIEW - NO. 0654-01-C

Petroleum Solvent Washer/Dryer

Initial Permit

Application No. 0654-01

Applicant: Halo Halo, Hawaii, LLC
dba Al Phillips Dry Cleaners

Facility: Petroleum Dry Cleaning

Equipment Location: 340 Kuulei Road, Kailua, Oahu

Responsible Official: Joe Tinsay **Title:** Owner **Phone:** 262-0933
Other Contact: Paul Azevedo **Title:** Manager **Phone:** 262-0885, 756-7563 (c)

Applicant's Mailing Address: 340 Kuulei Road
Kailua, HI 96734

SICC: 7216 – Dry Cleaning Plants

Proposed Facility:

Halo Halo Hawaii, LLC (HHH) is applying for an initial permit to operate a petroleum solvent washer/dryer at their Al Phillips Dry Cleaning facility. HHH is purchasing a 95-pound Multimatic petroleum washer/dryer machine. The dry-to-dry machine is computer controlled to ensure proper operation and quality control. The machine will use Exxon's DF 2000 as the cleaning fluid.

HHH offers its' customers same day service. As such, the facility will operate 7 days a week, 9 hours per day. Depending on the customer traffic, the washer/dryer may not always operate at full load.

Equipment Description

One Multimatic Multistar petroleum solvent washer/dryer, model no. MS 90/95

Air Pollution Controls

The Multimatic washer/dryer uses refrigerated coils to condense the VOC vapors.

Applicable Requirements

Hawaii Administrative Rules (HAR):

Chapter 11-59, Ambient Air Quality Standards

Chapter 11-60.1 Air Pollution Control

Subchapter 1, General Requirements

Subchapter 5, Covered Sources

Subchapter 6, Fees for Covered Sources, Noncovered Sources, and Agricultural Burning

11-60.1-111 Definitions

11-60.1-112 General Fee Provisions for Covered Sources

11-60.1-113 Application Fees for Covered Sources

11-60.1-114 Annual Fees for Covered Sources

11-60.1-115 Basis of Annual Fees for Covered Sources

Subchapter 8, Standards of Performance for Stationary Sources

11-60.1-161 New Source Performance Standards

NSPS:

40CFR Part 60 Subpart A – General Provisions

40 CFR Part 60 Subpart JJJ - Standards of Performance for Petroleum Dry Cleaners

The petroleum solvent washer/dryer is subject to NSPS Subpart JJJ because the total drying capacity at the facility is greater than 84 pounds and the washer/dryer will be installed after December 14, 1982.

Non-Applicable Requirements

PSD:

PSD does not apply since this facility is not a major source.

BACT:

A Best Available Control Technology (BACT) analysis is required for new or modified emission units if the net increase in pollutant emissions exceeds significant levels as defined in HAR §11-60.1-1. The potential VOC emission from this facility is less than the significant level of 40 tons per year.

CAM:

The purpose of Compliance Assurance Monitoring (CAM) is to provide a reasonable assurance that compliance is being achieved with large emissions units that rely on air pollution control device equipment to meet an emissions limit or standard. Pursuant to 40 Code of Federal Regulations, Part 64, for CAM to be applicable, the emissions unit must: (1) be located at a major source; (2) be subject to an emissions limit or standard; (3) use a control device to achieve compliance; (4) have potential pre-control emissions that are 100% of the major source level; and (5) not otherwise be exempt from CAM. Since the facility is not a major source, CAM does

not apply.

CERR (Consolidated Emission Reporting Rule):

40 CFR part 51, Subpart A – Emission Inventory Reporting Requirements, determines the annual emissions reporting frequency based on the actual emissions of each pollutant from any individual emission point within the facility that emits at or above the triggering levels. The trigger levels for VOC are 100 tons per year facility total and 25 tons per year for individual sources of VOC. Emissions from the washer/dryer is less than the trigger levels and thus, the facility is not subject to annual emission reporting under CERR. The Department requires facilities to report their annual emissions if the facility-wide emissions exceed the Department's trigger level of 25 tons per year for VOCs. The potential VOC emission from the washer/dryer is less than 25 tons per year and thus, the facility is not required to report annual emissions to the Department.

NESHAP/MACT:

There are no NESHAP or MACT standards for petroleum dry cleaning facilities.

Synthetic minor:

A synthetic minor is a facility that without limiting conditions, physical or operational, emits above the major triggering levels as defined by HAR 11-60.1-1 for either criteria pollutant(s) or hazardous air pollutant(s). This facility is not a synthetic minor.

Insignificant Activities/Exemptions

No insignificant activities were identified in the application.

Alternate Operating Scenarios

The applicant did not propose any alternate operating scenarios.

Project Emissions

Emissions from the facility were estimated by using the solvent consumption of the washer/dryer, the chemical make-up of the solvent, and the recent past history of the amount of clothing laundered at the facility. HHH expects to consume 1 gallon of solvent for every 1,000 pounds of clothes laundered. The MSDS and product bulletin from the manufacturer of the solvent did not contain any information on the composition of the cleaning fluid. As such, it is assumed that the cleaning fluid is 100 percent VOCs. The facility expects to launder approximately 120,000 pounds of clothes per annum. VOCs will be the only pollutant emitted

from this facility. The estimated VOC emission is:

$$120,000 \text{ lbs of clothes} * [1 \text{ gal}/1,200 \text{ lbs of clothes}] * [6.8 \text{ lbs VOC}/\text{gal}] = 680 \text{ lbs./yr VOC}$$

Air Quality Assessment

Emission sources from this facility are considered area sources. As such, modeling and an ambient air quality assessment are not required. In addition, there are no ambient air quality standards for VOCs.

Conclusion and Recommendation:

The new washer/dryer will be installed, operated, and maintained as directed by the manufacturer. Since the machine is new, the solvent recovery system should be operating properly and the malfunctions should be minimal. The estimated emissions are conservative as the analysis assumes that the cleaning fluid is 100 percent VOCs. Actual emissions from the facility should be less than the estimated 680 pounds per year.

Recommend issuance of permit.